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IRON ORE IN MARCH 2005

U.S. mine production of iron ore in March 2005, on a daily average basis, was slightly lower than that of the prior month, according to the U.S. Geological Survey. Average daily production was 137,000 metric tons per day (t/d), 1,200 t/d less than the figure for February 2005.

Shipments in March 2005, on a daily average basis, were more than double those of February 2005, owing to the opening of the Upper Lakes shipping season during the month. Mine stocks at the end of March were 1.6 million metric tons (Mt) greater than the corresponding stock figures on February 28, an increase of 24%.

U.S. imports of iron ore in February 2005 were almost five times greater than exports, with imports exceeding exports by 512,000 metric tons (t).

Prices.—BHP Billiton Limited (BHPB) settled annual contracts for iron ore at the same rate as both Companhia Vale do Rio Doce (CVRD) and Rio Tinto Limited. BHPB held out for several weeks for a $7.50 to $10 per metric ton increase above the rates received by CVRD and Rio Tinto (Mining Journal, 2005). Resistance from the China Iron & Steel Association, formed in mid-2003 by Chinese steel producers, helped hold BHPB prices to the Japanese and European benchmark levels established with CVRD and Rio Tinto (Jones, 2005b).

Spot prices of Indian fines in the Chinese market fell approximately 20% to about $75 per metric ton, while traders waited for the Chinese government to release a list of qualified iron ore importers (Metal Bulletin Daily, 2005a).

Exploration and Development.—In April, Palladon Ventures Ltd. (See Iron Ore in January 2005.) announced completion of the purchase of the Comstock/Mountain Lion Iron Project in Utah from Geneva Steel Company, and the posting of a $1.3 million reclamation bond for the property. Palladon has begun taking representative bulk samples from the exposed ore benches for analyses to determine the most effective method of beneficiation and to use in negotiations with potential customers for the direct shipping of ore (Palladon Ventures Ltd., 2005§[1]).

In Western Australia, Polaris Metals NL released encouraging analyses from recent bulk sampling at its Bullfinch Iron project, where the Mayfield deposit is one of the more promising resources being evaluated. A magnetite concentrate with iron content of greater than 69% and weight recoveries of between 35% and 47% were obtained from bulk samples. Silica grades of less than 3% were achieved at relatively coarse grind indicating possible reduced beneficiation costs. The Bullfinch property is located about 25 kilometers northwest of the town of Southern Cross. Production from the Bullfinch project was estimated at 2.5 Mt/yr of magnetite concentrate for at least 20 years. The Mayfield deposit is owned 40% by Polaris Metals NL and 60% by Portman Iron Ore Limited (MineBox, 2005§).

New Millennium Capital Corp. (NML) indicated that a Chinese delegation was scheduled to start due diligence on its 80%-owned LabMag iron ore project in Labrador, Canada, in June (see Iron Ore in December 2004). Production of between 10 and 12 Mt/yr of pellets was expected from the project with hypothetical costs of C$2.5 billion to include the mine, a slurry pipeline, pelletizing facilities, and a port with capacity for 350,000-deadweight-ton (dwt) vessels. The first phase of the pre-feasibility study was scheduled for completion in June, and a C$30 million bankable feasibility study was to be completed by the end of 2006 about the same time that the environmental studies were to be completed (Jones, 2005a).

Metal Bulletin reported that Rashtriya Ispat Nigam Limited's Visakhapatnam Steel Plant (VSP) was planning to develop additional iron ore deposits in India. With a planned expansion of hot metal production from 3.4 to 6.3 Mt/yr by 2008, VSP was attempting to acquire two iron ore deposits in Chattisgarh and Orissa States. Each of the ore bodies contains 100 Mt of reserves of iron ore with an iron content of between 62% and 64% (Bose, 2005).

Companies from Australia and the Republic of Korea and Chinese government entities are all actively pursuing mine development opportunities in India. In 1995, Rio Tinto entered into a joint-venture agreement with Orissa Mining Corporation to develop two mines—Gandhamardan and Malangtuli—with much of the ore being exported. Now that 40 companies are expressing interest in developing steel plants in Orissa State, the

[1]References that include a section mark (§) are found in the Internet References Cited section.

Indians plan to renegotiate the joint venture. POSCO in association with BHPB has proposed developing a steel plant near Paradip along with mining and support infrastructure. Meanwhile, a Chinese delegation met with the Orissa Mining Development Corporation and planned to meet with government representatives of the States of Jharkhand and Karnataka to discuss raw material sourcing, as well as mining and steelmaking opportunities within India (Saha, 2005§; Telegraph, The, 2005§).

In Indonesia, Aretae Ltd. (Singapore) received one mining license and was expecting to get a second shortly for two deposits with estimated reserves of between 10 and 12 Mt of iron ore with 63.5% to 68% iron content (Metal Bulletin Daily, 2005c).

Domestic Update.—The president of Mesabi Nugget LLC and a Minnesota State Senator recently stated that the Mesabi Nugget project is on track for construction of a plant at the site of the former LTV Steel Mining Co. property at Hoyt Lakes, MN. The Mesabi Nugget project is planned to produce 500,000 metric tons per year (t/yr) of high-quality 95 to 96% iron content pellets from local taconite ores. Iron Range lawmakers, the Governor's office, and Minnesota Pollution Control Agency officials are expediting efforts to prepare the permitting for the Mesabi Nugget plant (Mesabi Daily News, 2005§).

Taconite pellet production for Cleveland-Cliffs Inc is expected to increase by about 1.5 Mt in 2005. Cliffs is negotiating with the Canadian National Railway Company to transport pellets to Taconite Harbor, MN, and would plan to permit and build storage facilities to meet the increased production planned from their wholly-owned subsidiary—Northshore Mining Co. (Ramsay, 2005§).

World Production Update.—In Kwinana, Western Australia, the HIsmelt pig iron plant was expected to have been operational by May 1. A conservative 2-year ramp-up to full capacity of 0.8 Mt/yr was announced to address any issues related to the new technology (Metal Bulletin Daily, 2005b).

Quebec Cartier Mining Company (QCM), a Canadian iron ore and pellet producer, had its latest contract offer rejected by the United Steelworkers union. Union members had been working under an extension of the previous 4-year contract, which expired on February 28. QCM planned to continue shipping concentrates and pellets until existing inventories were exhausted (Metal Bulletin, 2005).

Fears of export of Russian and Kazakh iron ore to Chinese steelmakers have prompted Russia's Magnitogorsk Iron & Steelworks (MMK) to seriously consider expanding its captive iron ore mines to increase production from the 10% of supply they now provide. Metal Bulletin reported that MMK was proceeding with two strategies to increase iron ore shipments. The first was to acquire an existing mine—with the Sokolovsko-Sarbaisky Mine, only 300 kilometers distant from the steel plant, a strong candidate. The second was to explore for and develop iron ore deposits in the Chelyabinsk Oblast and other regions (Rivituso, 2005).

Transportation.—Shipments of iron ore in U.S.-flag vessels on the Great Lakes, year-to-date through March 2005, at 4.6 Mt, were 16% below the year-to-date figure for March of 2004. The 2005 figure represents a 28% increase over the average of March year-to-date figures for the period from 2000 to 2004 (Lake Carriers' Association, 2005).

The world's shipping fleet continued to consolidate, as Excel Maritime Carriers Ltd. (Bermuda), a dry bulk seaborne transport specialist, agreed in April 2005 to acquire two Panamax-size carriers, increasing its fleet to 19 dry bulk carriers. Excel Maritime had plans to increase their fleet by 5 more vessels by early July 2005, raising their fleet capacity to over 1.2 million dwt (Excel Maritime Carriers Ltd., 2005§).

Two Chinese companies and the State Development & Investment Corporation have signed a joint venture agreement to build a 50-Mt/yr coal terminal, according to China Daily. The 36-meter-deep terminal, to be located at Caofeidian in Heibei Province, will also handle iron ore and crude oil (McCloskey's Coal News, 2005§).

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TABLE 1

U.S. PRODUCTION AND SHIPMENTS OF IRON ORE[1, 2]

(Exclusive of ore containing 5% or more of manganese)

(Thousand metric tons)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2004:				
March	4,130	12,600	2,710	7,810
April	4,630	17,300	5,260	13,100
May	4,800	22,100	5,300	18,400
June	4,470	26,500	5,880	24,200
July	4,950	31,500	5,550	29,800
August	4,500	36,000	5,670	35,500
September	4,420	40,400	5,420	40,900
October	5,110	45,500	4,780	45,700
November	4,730	50,200	5,110	50,800
December	4,450	54,700	5,150	55,900
2005:				
January	4,420	4,420	3,350	3,350
February	3,870	8,290	1,150	4,500
March	4,240	12,500	2,610	7,110

[1]Data are rounded to no more than three significant digits.

[2]Excludes byproduct ores.

TABLE 2

U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN MARCH[1, 2]

(Thousand metric tons)

State	Production		Shipments[3]		Stocks[4]	
	2005	2004	2005	2004	2005	2004
Michigan	802	768	761	736	1,900	2,060
Minnesota	3,440	3,360	1,850	1,970	6,510	6,720
Total	4,240	4,130	2,610	2,710	8,410	8,780

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Excludes byproduct ore.

[3]Includes rail and vessel.

[4]Includes mines, plants, and loading docks.

TABLE 3
CANADA: SHIPMENTS OF IRON ORE[1]

(Thousand dry metric tons)

Period	Newfoundland	Quebec	British Columbia	Total
2004:				
February	1,070	589	7	1,660
March	1,250	1,030	6	2,290
April	1,650	858	5	2,520
May	1,920	1,740	7	3,660
June	1,970	981	8	2,960
July	1,710	1,380	10	3,110
August	698	1,120	8	1,830
September	124	1,220	5	1,350
October	635	1,570	7	2,210
November	1,390	958	10	2,360
December	1,370	944	9	2,330
Year total	14,900	13,200	87	28,300
2005:				
January	1,210 r	1,070	8	2,280 r
February	928	748	8	1,680

rRevised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Natural Resources Canada.

TABLE 4
PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF FURNACE[1, 2]

(Thousand metric tons)

	Pig iron production, blast furnace		Raw steel production			
			Basic oxygen furnace[3]		Electric furnace	
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2004:						
February	3,200	6,540	3,440 r	7,390	4,130 r	8,020
March	3,630 r	10,200	4,100 r	11,500	4,270 r	12,300
April	3,400	13,600	3,840	15,300	4,230	16,500
May	3,400 r	17,000	3,780 r	19,100	4,560	21,100
June	3,390 r	20,400	3,790 r	22,900	4,340 r	25,400
July	3,370 r	23,700	3,800 r	26,700	5,010 r	30,400
August	3,490 r	27,200	3,830	30,500	4,620	35,100
September	3,400 r	30,600	3,020 r	33,500	5,370 r	40,400
October	3,570	34,200	3,030 r	36,600	5,630 r	46,100
November	2,140 r	36,300	5,520 r	42,100	2,580 r	48,600
December	4,270 r	40,600	3,810	45,900	4,390 r	53,000
2005:						
January	3,420	3,420	3,890	3,890	4,390	4,390
February	3,260	6,680	3,710	7,590	3,930	8,320

rRevised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Inconsistencies in 2004 year-to-date figures for pig iron and raw steel production reflect consolidated revisions for previous months.
[3]Raw steel production figures for the basic oxygen process is greater than the corresponding pig iron production figures because scrap is routinely melted in the basic oxygen furnace together with the molten pig iron.

Source: American Iron and Steel Institute.

TABLE 5

U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE[1, 2]

(Thousand metric tons)

Country of destination and type of product	2004				2005	
	3rd quarter	4th quarter	January-December	December	January	February
Canada	2,300	1,710	7,830	464	807	139
China	129	26	297	26	--	--
Mexico	1	2	4	(3)	(3)	(3)
Slovakia	134	--	187	--	--	--
Trinidad and Tobago	29	--	29	--	--	--
Other	1	1	53	(3)	(3)	(3)
Total	2,590	1,740	8,400	491	807	139
Pellets	2,420	1,700	8,100	464	806	137
Concentrates	2	2	25	(3)	(3)	1
Direct shipping ores	169	30	264	26	(3)	(3)
Other	(3)	3	6	1	(3)	1
Total	2,590	1,740	8,400	491	807	139

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes agglomerates.

[3]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE[1, 2]
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2005 February Thousand metric tons	2005 February Value[3] (thousand dollars)	2005 Year to date Thousand metric tons	2005 Year to date Value[3] (thousand dollars)	2005 Year to date Value[3] (dollars per ton)	2004 January-February Thousand metric tons
Australia	--	--	--	--	--	(4)
Brazil	494	14,600	772	23,500	30.45	741
Canada	69	2,760	304	11,900	39.23	505
Chile	37	961	82	2,130	26.11	59
China	(4)	2	(4)	2	263.13 [5]	--
Finland	--	--	--	--	--	4
Greece	--	--	13	243	18.80	--
Mexico	1	26	1	26	25.02	26
Paraguay	1	34	4	68	16.80	--
Peru	(4)	4	(4)	4	18.04	15
Russia	50	4,470	99	8,550	86.00 [6]	--
South Africa	--	--	--	--	--	(4)
Spain	--	--	--	--	--	(4)
Trinidad and Tobago	--	--	368	10,700	29.09	--
Venezuela	--	--	14	499	36.00	--
Total	651	22,800	1,660	57,700	34.80	1,350
Concentrates	37	963	82	2,140	26.13	94
Coarse ores	1	34	18	567	31.66	(4)
Fine ores	216	4,510	738	19,500	26.40	327
Pellets	397	17,300	818	35,400	43.32	925
Briquettes	--	--	--	--	--	--
Other agglomerates	1	26	1	26	25.02	(4)
Roasted pyrites	--	--	--	--	--	4
Total	651	22,800	1,660	57,700	34.80	1,350

-- Zero.
[1]Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes agglomerates.
[3]Customs value. Excludes international freight and insurance charges.
[4]Less than 1/2 unit.
[5]May include hot-briquetted iron, direct-reduced iron, or other specialty product.
[6]All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN FEBRUARY 2005[1, 2]
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product: Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	Total
Brazil	--	--	215	279	--	--	494
Canada	--	--	1	68	--	--	69
Chile	37	--	--	--	--	--	37
China	(3)	--	--	--	--	--	(3)
Mexico	--	--	--	--	1	--	1
Paraguay	--	1	--	--	--	--	1
Peru	--	--	(3)	--	--	--	(3)
Russia	--	--	--	50	--	--	50
Total	37	1	216	397	1	--	651

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes agglomerates.
[3]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY[1]

Country of origin	2005 February Thousand metric tons	2005 February Value[2] (thousand dollars)	2005 Year to date Thousand metric tons	2005 Year to date Value[2] (thousand dollars)	2005 Year to date Value[2] (dollars per ton)	2004 January-February Thousand metric tons
Brazil	279	10,100	489	17,700	36.14	456
Canada	68	2,750	230	9,230	40.12	470
Russia	50	4,470	99	8,550	86.00	--
Total	397	17,300	818	35,400	43.32	925

-- Zero.
[1]Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.
[2]Customs value. Excludes international freight and insurance charges.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,
BY CUSTOMS DISTRICT[1, 2]
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	February 2005	January-February 2005	January-February 2004
Baltimore, MD (13)	332	586	572
Buffalo, NY (09)	1	2	1
Chicago, IL (39)	--	26	(3)
Great Falls, MT (33)	--	--	(3)
Houston-Galveston, TX (53)	--	--	28
Los Angeles, CA (27)	(3)	(3)	--
Mobile, AL (19)	61	61	--
New Orleans, LA (20)	255	977	746
Nogales, AZ (26)	1	1	(3)
Philadelphia, PA (11)	--	--	4
San Francisco, CA (28)	1	4	--
Total	651	1,660	1,350

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes agglomerates.
[3]Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF PELLETS,
BY CUSTOMS DISTRICT[1]

(Thousand metric tons)

Customs district (code no.)	February 2005	January-February 2005	January-February 2004
Baltimore, MD (13)	117	303	253
Chicago, IL (39)	--	26	--
Houston-Galveston, TX (53)	--	--	28
Mobile, AL (19)	61	61	--
New Orleans, LA (20)	219	428	645
Total	397	818	925

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.